

CLAIMS

We claim:

- 1 1. Method for processing a client session request,
2 comprising the steps of:

3 negotiating environment parameters for establishing a
4 connection-oriented connection with said client;

5 inviting said client to submit user variables;

6 responsive to receiving a user variable requesting a
7 custom confirmation record, sending to said client a
8 confirmation record and custom record data.
- 1 2. The method of claim 1, said negotiating, inviting, and
2 sending steps executing within the application layer of a
3 TCP/IP protocol stack.

1 3. The method of claim 1, further comprising the step
2 responsive to a user variable requesting a confirmation
3 record, sending to said client a confirmation record without
4 said custom record data.

1 4. The method of claim 1, said confirmation record
2 including a field defining a pass through data length, said
3 pass through data including said confirmation record and
4 said custom record data.

1 5. The method of claim 1, further comprising the step of
2 appending said custom record data to said confirmation
3 record.

1 6. The method of claim 1, said request being for a default
2 custom confirmation record, and further comprising the step
3 of sending to said client default data in said custom record
4 data.

1 7. The method of claim 1, said request being for a defined
2 custom confirmation record, said request including a list of
3 one or more predefined information items, further comprising
4 the step of sending to said client defined data in said
5 custom record data.

1 8. The method of claim 7, said sending step including
2 executing a customer defined exit program on said list to
3 generate said defined data.

1 9. The method of claim 4, further comprising the step of
2 providing in said custom record data indicia identifying a
3 device allocated by a host server.

1 10. The method of claim 4, further comprising the step of
2 providing in said custom record data indicia identifying a
3 terminal or printer device allocated by a host server.

1 11. The method of claim 4, further comprising the step of
2 providing in said custom record data indicia identifying an
3 associated device linked to a current session by a host.

1 12. The method of claim 4, further comprising the step of
2 providing in said custom record data indicia identifying a
3 physical location for receiving output.

1 13. The method of claim 4, further comprising the step of
2 providing in said custom record data indicia identifying
3 system security level and password encryption requirements.

1 14. The method of claim 4, further comprising the step of
2 providing in said custom record data indicia identifying
3 another device for retrying a rejected request.

1 15. The method of claim 4, further comprising the step of
2 providing in said custom record data indicia identifying a
3 reason for a failed auto-signon request.

1 16. The method of claim 4, further comprising the step of
2 providing in said custom record data indicia identifying a
3 reason for denial of session connection request upon system
4 overload and redirection to an alternate time or host.

1 17. The method of claim 4, further comprising the step of
2 providing in said custom record data indicia identifying
3 custom information for interpretation by said client.

1 18. A client/server system, comprising:
2 a custom confirmation record;
3 a user exit program running on said server;
4 said client operating in conjunction with said user
5 exit program for requesting said custom confirmation
6 record

1 19. The system of claim 18, said client being a Telnet
2 client.

1 20. The system of claim 18, further comprising:
2 said client being selectively operable for negotiating
3 a send-custom-confirmation-record with a 'yes', 'no' or
4 defined data value; and
5 said user exit interpret said data value and sending
6 default or defined information back to said client in
7 said custom confirmation record.

1 21. The system of claim 20, said custom confirmation record
2 containing diagnostic information provided by said server
3 along with custom information provided by said user exit
4 program.

1 22. The system of claim 21, said custom information being
2 provided by user exit programs executing in said server and
3 said client.

1 23. A method for operating a client to establish a network
2 connection with a server, comprising the steps of:

3 negotiating environment parameters for establishing a
4 connection-oriented connection with said server;

5 said parameters including a request for said server to
6 provide a custom confirmation record; and

7 responsive to said request, receiving said confirmation
8 record.

1 24. The method of claim 23, said custom confirmation record
2 including return code, system name, device name and custom
3 data.

1 25. The method of claim 24, further comprising the steps
2 of:

3 operating said server to request a custom information
4 record from said client.

1 26. The method of claim 25, said request comprising an
2 invitation to said client from said server to respond with
3 all environment variables.

1 27. The method of claim 26, said client responding to said
2 invitation by returning a custom information record as part
3 of said environment variables.

1 28. The method of claim 27, said client responding to said
2 invitation with a request that said server return to said
3 client a custom confirmation record.

1 29. The method of claim 28, further the steps of

2 operating an exit program to interpret the value in
3 said custom information record to selectively return a
4 custom confirmation record response.

1 30. The method of claim 28, further comprising the steps of
2 specifying in said custom confirmation record a list of
3 custom fields to be returned by said server.

1 31. The method of claim 28, further comprising the steps of
2 specifying in said custom confirmation record unstructured
3 data for subsequent parsing and processing by said server,
4 an exit program, or an independent job.

1 32. Method for operating a client to establish a network
2 connection with a server, comprising the steps of:

3 negotiating environment parameters for establishing a
4 connection-oriented connection with said server;

5 receiving an invitation to submit user variables;

6 responsive to sending to said server a user variable
7 requesting a custom confirmation record, receiving from
8 said server a confirmation record and custom record
9 data.

1 33. The method of claim 32, said negotiating, inviting, and
2 sending steps executing within the application layer of a
3 TCP/IP protocol stack.

1 34. The method of claim 32, further comprising the step
2 responsive to said invitation to submit user variables,
3 requesting a confirmation record, and responsive thereto
4 receiving from said server a confirmation record without
5 said custom record data.

1 35. The method of claim 32, said confirmation record
2 including a field defining a pass through data length, said
3 pass through data including said confirmation record and
4 said custom record data.

1 36. The method of claim 32, further comprising the step of
2 receiving said custom record data appended to said
3 confirmation record.

1 37. The method of claim 32, said request being for a
2 default custom confirmation record, and further comprising
3 the step of receiving from said server, default data in said
4 custom record data.

1 38. The method of claim 32, said request being for a
2 defined custom confirmation record, said request including a
3 list of one or more predefined information items, further
4 comprising the step of receiving from said server, client
5 defined data in said custom record data.

1 39. The method of claim 38, further including the step of
2 providing to said server a customer defined exit program for
3 parsing said list to generate said defined data.

1 40. The method of claim 35, further comprising the step of
2 receiving in said custom record data indicia identifying a
3 device allocated by a host server.

1 41. The method of claim 35, further comprising the step of
2 receiving in said custom record data indicia identifying a
3 terminal or printer device allocated by a host server.

1 42. The method of claim 35, further comprising the step of
2 receiving in said custom record data indicia identifying an
3 associated device linked to a current session by a host.

1 43. The method of claim 35, further comprising the step of
2 receiving in said custom record data indicia identifying a
3 physical location for receiving output.

1 44. The method of claim 35, further comprising the step of
2 receiving in said custom record data indicia identifying
3 system security level and password encryption requirements.

1 45. The method of claim 35, further comprising the step of
2 receiving in said custom record data indicia identifying
3 another device for retrying a rejected request.

1 46. The method of claim 35, further comprising the step of
2 receiving in said custom record data indicia identifying a
3 reason for a failed auto-signon request.

1 47. The method of claim 35, further comprising the step of
2 receiving in said custom record data indicia identifying a
3 reason for denial of session connection request upon system
4 overload and redirection to an alternate time or host.

1 48. The method of claim 35, further comprising the step of
2 receiving in said custom record data indicia identifying
3 custom information for interpretation by said client.

1 49. A client system for establishing a network connection
2 with a server, comprising:

3 a first logic element for negotiating environment
4 parameters for establishing a connection-oriented
5 connection with said server;

6 said parameters including a request for said server to
7 provide a custom confirmation record; and

8 a second logic element responsive to said request, for
9 receiving said confirmation record.

1 50. The system of claim 49, said custom confirmation record
2 including return code, system name, device name and custom
3 data.

1 51. The system of claim 50, further comprising:

2 a third logic element for operating said server to
3 request a custom information record from said client.

4 52. The system of claim 51, said request comprising an
5 invitation to said client from said server to respond with
6 all environment variables.

1 53. The system of claim 52, said client further comprising
2 a fourth logic element for responding to said invitation by
3 returning a custom information record as part of said
4 environment variables.

1 54. The system of claim 53, said client further comprising
2 a fifth logic element for responding to said invitation with
3 a request that said server return to said client a custom
4 confirmation record.

1 55. The system of claim 54, said server further comprising
2 an exit program for interpreting the value in said custom
3 information record to selectively return a custom
4 confirmation record response.

1 56. The system of claim 54, further comprising a logic
2 element for specifying a list of custom fields to be
3 returned by said server in said custom confirmation record.

1 57. The system of claim 54, further comprising a logic
2 element for specifying in said custom confirmation record
3 unstructured data for subsequent parsing and processing by
4 said server, an exit program, or an independent job.

1 58. System for processing a client session request,
2 comprising:

3 a logic element for negotiating environment parameters
4 for establishing a connection-oriented connection with
5 said client and inviting said client to submit user
6 variables; and

7 an exit program responsive to receiving a user variable
8 requesting a custom confirmation record for sending to
9 said client a confirmation record and custom record
10 data.

1 59. The system of claim 58, further comprising a TCP/IP
2 protocol stack including within an application layer said
3 exit program generating said custom record data.

1 60. The system of claim 58, said logic element further
2 operable responsive to a user variable requesting a
3 confirmation record for sending to said client a
4 confirmation record without said custom record data.

1 61. The system of claim 58, said confirmation record
2 including a field defining a pass through data length, said
3 pass through data including said confirmation record and
4 said custom record data.

1 62. The system of claim 58, said logic element further
2 operable for appending said custom record data to said
3 confirmation record.

1 63. System for operating a client to establish a network
2 connection with a server, comprising:

3 a first logic element for negotiating environment
4 parameters for establishing a connection-oriented
5 connection with said server and for receiving an
6 invitation to submit user variables;

7 a second logic element responsive to sending to said
8 server a user variable requesting a custom confirmation

9 record for receiving from said server a confirmation
10 record and custom record data.

1 64. The system of claim 63, further comprising a TCP/IP
2 protocol stack including an application layer within which
3 said logic elements execute.

1 65. The system of claim 63, further comprising the step
2 responsive to said invitation to submit user variables,
3 requesting a confirmation record, and responsive thereto
4 receiving from said server a confirmation record without
5 said custom record data.

1 66. The system of claim 63, said confirmation record
2 including a field defining a pass through data length, said
3 pass through data including said confirmation record and
4 said custom record data.

1 67. The system of claim 63, said second logic element
2 further responsive for receiving said custom record data
3 appended to said confirmation record.

1 68. The system of claim 63, said request being for a
2 default custom confirmation record, and said second logic
3 element further operable for receiving from said server
4 default data in said custom record data.

1 69. The system of claim 63, said request being for a
2 defined custom confirmation record, said request including a
3 list of one or more predefined information items, said
4 second logic element further operable for receiving from
5 said server client defined data in said custom record data.

1 70. The system of claim 69, further including a logic
2 element for providing to said server a customer defined exit
3 program for parsing said list to generate said defined data.

1 71. A program storage device readable by a machine,
2 tangibly embodying a program of instructions executable by a
3 machine to perform method steps for processing a client
4 session request, said method steps comprising:

5 negotiating environment parameters for establishing a
6 connection-oriented connection with said client;

7 inviting said client to submit user variables;

8 responsive to receiving a user variable requesting a
9 custom confirmation record, sending to said client a
10 confirmation record and custom record data.

1 72. The program storage device of claim 71, said
2 negotiating, inviting, and sending steps executing within
3 the application layer of a TCP/IP protocol stack.

1 73. The program storage device of claim 71, said method
2 steps further comprising, responsive to a user variable
3 requesting a confirmation record, sending to said client a
4 confirmation record without said custom record data.

1 74. The program storage device of claim 71, said
2 confirmation record including a field defining a pass
3 through data length, said pass through data including said
4 confirmation record and said custom record data.

1 75. The program storage device of claim 71, said method
2 steps further comprising the step of appending said custom
3 record data to said confirmation record.

1 76. The program storage device of claim 71, said request
2 being for a default custom confirmation record, and said
3 method steps further comprising the step of sending to said
4 client default data in said custom record data.

1 77. The program storage device of claim 71, said request
2 being for a defined custom confirmation record, said request
3 including a list of one or more predefined information
4 items, and said method steps further comprising the step of
5 sending to said client defined data in said custom record
6 data.

1 78. The program storage device of claim 77, said sending
2 step including executing a customer defined exit program on
3 said list to generate said defined data.

1 79. The program storage device of claim 74, said method
2 steps further comprising the step of providing in said
3 custom record data indicia identifying a device allocated by
4 a host server.

1 80. The program storage device of claim 74, said method
2 steps further comprising the step of providing in said
3 custom record data indicia identifying a terminal or printer
4 device allocated by a host server.

1 81. The program storage device of claim 74, said method
2 steps further comprising the step of providing in said
3 custom record data indicia identifying an associated device
4 linked to a current session by a host.

1 82. The program storage device of claim 74, said method
2 steps further comprising the step of providing in said
3 custom record data indicia identifying a physical location
4 for receiving output.

1 83. The program storage device of claim 74, said method
2 steps further comprising the step of providing in said
3 custom record data indicia identifying system security level
4 and password encryption requirements.

1 84. The program storage device of claim 74, said method
2 steps further comprising the step of providing in said
3 custom record data indicia identifying another device for
4 retrying a rejected request.

1 85. The program storage device of claim 74, said method
2 steps further comprising the step of providing in said
3 custom record data indicia identifying a reason for a failed
4 auto-signon request.

1 86. The program storage device of claim 74, said method
2 steps further comprising the step of providing in said
3 custom record data indicia identifying a reason for denial
4 of session connection request upon system overload and
5 redirection to an alternate time or host.

1 87. The program storage device of claim 74, said method
2 steps further comprising the step of providing in said
3 custom record data indicia identifying custom information
4 for interpretation by said client.

1 88. A program storage device readable by a machine,
2 tangibly embodying a program of instructions executable by a
3 machine to perform method steps for operating a client to
4 establish a network connection with a server, said method
5 steps comprising:

6 negotiating environment parameters for establishing a

7 connection-oriented connection with said server;
8 receiving an invitation to submit user variables;
9 responsive to sending to said server a user variable
10 requesting a custom confirmation record, receiving from
11 said server a confirmation record and custom record
12 data.

1 89. The program storage device of claim 88, said
2 negotiating, inviting, and sending steps executing within
3 the application layer of a TCP/IP protocol stack.

1 90. The program storage device of claim 88, said method
2 steps further comprising the step, responsive to said
3 invitation to submit user variables, of requesting a
4 confirmation record, and responsive thereto receiving from
5 said server a confirmation record without said custom record
6 data.

1 91. The program storage device of claim 88, said
2 confirmation record including a field defining a pass
3 through data length, said pass through data including said
4 confirmation record and said custom record data.

1 92. The program storage device of claim 88, said method
2 steps further comprising the step of receiving said custom
3 record data appended to said confirmation record.

1 93. The program storage device of claim 88, said request
2 being for a default custom confirmation record, and said
3 method steps further comprising the step of receiving from
4 said server default data in said custom record data.

1 94. The program storage device of claim 88, said request
2 being for a defined custom confirmation record, said request
3 including a list of one or more predefined information
4 items, said method steps further comprising the step of
5 receiving from said server client defined data in said
6 custom record data.

1 95. The method of claim 94, further including the step of
2 providing to said server a customer defined exit program for
3 parsing said list to generate said defined data.

1 96. The program storage device of claim 91, said method
2 steps further comprising the step of receiving in said
3 custom record data indicia identifying a device allocated by
4 a host server.

1 97. The program storage device of claim 91, said method
2 steps further comprising the step of receiving in said
3 custom record data indicia identifying a terminal or printer
4 device allocated by a host server.

1 98. The program storage device of claim 91, said method
2 steps further comprising the step of receiving in said
3 custom record data indicia identifying an associated device
4 linked to a current session by a host.

1 99. The program storage device of claim 91, said method
2 steps further comprising the step of receiving in said
3 custom record data indicia identifying a physical location
4 for receiving output.

1 100. The program storage device of claim 91, said method
2 steps further comprising the step of receiving in said
3 custom record data indicia identifying system security level
4 and password encryption requirements.

1 101. The program storage device of claim 91, said method
2 steps further comprising the step of receiving in said
3 custom record data indicia identifying another device for
4 retrying a rejected request.

1 102. The program storage device of claim 91, said method
2 steps further comprising the step of receiving in said
3 custom record data indicia identifying a reason for a failed
4 auto-signon request.

1 103. The program storage device of claim 91, said method
2 steps further comprising the step of receiving in said
3 custom record data indicia identifying a reason for denial
4 of session connection request upon system overload and
5 redirection to an alternate time or host.

1 104. The program storage device of claim 91, said method
2 steps further comprising the step of receiving in said
3 custom record data indicia identifying custom information
4 for interpretation by said client.

1 105. A computer program product or computer program element
2 for operating a server in a network according to method
3 steps comprising:

4 negotiating environment parameters for establishing a
5 connection-oriented connection with a client;

6 inviting said client to submit user variables;

7 responsive to receiving a user variable requesting a
8 custom confirmation record, sending to said client a
9 confirmation record and custom record data.

1 106. A computer program product or computer program element
2 for operating a client in a network according to method
3 steps comprising:

4 negotiating environment parameters for establishing a
5 connection-oriented connection with said server;

6 receiving an invitation to submit user variables;

7 responsive to sending to said server a user variable
8 requesting a custom confirmation record, receiving from

said server a confirmation record and custom record data.

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